

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

GENERAL ORDER OF APPROVAL FOR SMALL
NATURAL GAS FIRED STEAM GENERATING BOILERS

General Order No. 06AQ-G200
Issued _____, 2006

I. Applicability Criteria for this Air Quality General Order of Approval

Criterion	Limitation
Fuel	Natural gas, compressed natural gas, and liquefied natural gas only
Boiler size	Between 4 and 50 mmBtu/hour heat input
Boiler type	New package (factory built) boiler utilizing low NOx burners with or without exhaust gas recirculation
Location	Located in counties or at industrial facilities under jurisdiction of the Department of Ecology
Minimum distance from stack to property line	100 ft (30.5 m)
Minimum distance from stack to hills or buildings above the top of the stack	100 ft (30.5 m)
Minimum flue gas temperature	180 °F (82 °C)
Stack height criteria	Minimum of 1.3 times the building height of the nearest building roof within 100 ft of the stack
Nitrogen oxides limitation	9 parts per million by volume (ppmv) @ 3% O ₂
Carbon monoxide limitation	50 ppmv @ 3% O ₂
Other criteria	<ol style="list-style-type: none">1. The boiler is not part of a new major stationary source or major modification to a major stationary source which is subject to preview under the Prevention of Significant Deterioration program.2. The addition of the boiler to an existing source does not make the source subject to the Air Operating Permit program or require a modification in an existing Air Operating Permit.

II. Process to apply for coverage

Submit:

1. Submit the appropriate application forms. The forms are available from the Ecology office which covers the location of your proposed boiler installation.

Air Quality Program Central Regional Office 15 West Yakima Ave -- Suite 200 Yakima, WA 98902-3452 Tel. No 509-575-2490	Air Quality Program Eastern Regional Office N. 4601 Monroe Spokane, WA 99205-1295 Tel. No 509-329-3400
Industrial Section PO Box 47600 Olympia, WA 98504-7600 Tel. No. 360-407-6945	Nuclear Waste Program Hanford Unit 3100 Port of Benton Blvd. Richland, WA 99354 Tel. No. 509-372-7950
On the internet at : http://www.ecy.wa.gov/programs/air	Air Quality Program Northwest Regional Office 3190 160 th Ave. SE Bellevue, Washington 98008-5452 Tel. No. 425-649-7283

2. The application/coverage fee of \$500 (make check payable to the Department of Ecology)
3. Provide documentation of State Environmental Policy Act (SEPA) compliance
If SEPA for this project has been done by another agency, submit copy of DNS, MDNS, or EIS issued for the project
If SEPA has not been completed by another agency, submit a completed SEPA checklist and our SEPA processing fee of. A copy of the checklist is available from the above contacts or on the internet at http://www.ecy.wa.gov/biblio/forms-sepa_forms.html.

Granting of Coverage

For those units that qualify for coverage, the applicant will receive a Coverage Order within 30 days after the complete application has been received by Ecology.

For those boilers that do not qualify for coverage under this General Order, the applicant will receive a letter from Ecology within 30 days after the application has been received.

The letter will explain why the unit does not qualify for coverage under this General Order of Approval and how to apply for an air quality approval for the boiler.

III. Conditions of Approval

1. Siting criteria for the boiler exhaust stack

Parameter	Requirement or limitation
Stack height	Minimum of 1.3 times the building height of the nearest building roof within 100 ft of the stack
Stack location: From property line	At least 100 ft (30.5 meter)
From building or hill higher than stack height	At least 100 ft (30.5 meter)
Exhaust temperature	At least 180 °F (82 °C)

2. Operational and Emission limitations, monitoring, recordkeeping and reporting requirements for the boiler

Pollutant or parameter	Limitation(s)	Monitoring	Recordkeeping	Reporting
Fuel usage	Only natural gas, compressed natural gas or liquefied natural gas	Natural gas purchase records or gas meter for this boiler.	Annual natural gas usage for the boiler in cubic feet based on monthly usage by the boiler	None
Hours of operation	No limit on daily or annual hours of operation	None	None	None
Nitrogen oxides	9 ppmv @ 3% O ₂	Boiler manufacturer's certification of performance	Manufacturer's certification of performance.	None
Carbon monoxide	50 ppmv @ 3% O ₂	Boiler manufacturer's certification of performance	Manufacturer's certification of performance.	None
Particulate matter Limit is applicable to boilers 30 MMBtu/hr heat input rate or larger.	0.30 lb/MMBtu	Fuel supplier's certification of total sulfur content of the natural gas.	Retain copy of fuel quality certificates from fuel supplier.	None

Other Conditions of Approval

3. The boiler installed shall be the boiler described in the application and Order issued granting coverage under this General Order of Approval.
4. Unit installation information. The permittee shall submit to Ecology and, for boilers 10 MMBtu/hr or larger, also to Region 10 of the Environmental Protection Agency, the following information¹:
 - a. The date installation of the boiler is complete with anticipated startup date. The anticipated start-up date must be no later than thirty days after the installation completion date.
 - b. Submit actual startup date no later than 15 days after initial startup date.
5. For boilers greater than 10 MMBtu/hr heat input, the owner is to retain records of boiler startups, shutdowns and malfunctions with the boiler. Information to be recorded includes:
 - a. Date time and duration of each boiler start-up
 - b. Date time and duration of each of boiler shut down
 - c. Date time and duration of each of boiler malfunction and what was done to correct the malfunction.
6. All records and information required in Approval Conditions 2 through 5 must be kept by the boiler owner for 2 years after the record is created.
7. Operation and Maintenance.
 - a. The permittee is to follow all recommended operation and equipment maintenance provisions supplied by the manufacturer of the unit.
 - b. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the boiler including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
 - c. If the any smoke can be seen coming from the stack, the permittee is to take immediate steps to bring the boiler back into proper operation per the manufacturer's operation and maintenance provisions. Smoke from a natural gas boiler is indicative of a boiler malfunction or poor operating condition.
8. Periodic emissions inventory information and other information may be requested by the Ecology. Emissions information requested by Ecology shall be submitted within 30 days of receiving the request unless otherwise specified.
9. Annual/periodic Registration or Air Operating Permit fees. The applicant will pay the required registration fees within 30 days of receipt of the invoice from Ecology.

¹ Electronic mail submittals of the notifications to the approving office are encouraged to reduce paperwork.

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Small natural gas fired boilers


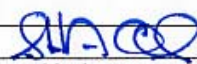
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10. Access to the source for the purpose of determining compliance with the terms of this General Order of Approval by Ecology staff shall be permitted during normal business hours. Failure to allow such access is grounds for an enforcement action under the Washington State Clean Air Act.
11. The applicant is required to comply with applicable rules and regulations pertaining to air quality, and conditions of operation imposed upon issuance of this order. Any violation of applicable state and/or federal air quality rules and regulations or of the terms of this approval shall be subject to the sanctions provided in Chapter 70.94 RCW. Authorization under this Order may be modified, suspended, or revoked in whole or part for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of this authorization;
 - b. Obtaining this authorization by misrepresentation or failure to disclose fully all relevant facts.
12. The provisions of this General Order of Approval are severable and, if any provision of this authorization, or application of any provisions of this authorization to any circumstance, is held invalid, the application of such provision to their circumstances, and the remainder of this authorization, shall not be affected thereby.

IV. Legal Basis to Issue This General Order of Approval

The Department of Ecology Air Quality Program is issuing this General Order of Approval as allowed under Washington Administrative Code (WAC) 173-400-560. Receipt of a Coverage Order for installation of a specific unit under this approval satisfies the requirements of WAC 173-400-110.

Approvals

PREPARED BY:	APPROVED BY:
	
Date: <i>May 12 2006</i>	Date: 
Alan Newman, PE	Stuart A. Clark, Program Manager
Air Quality Program	Air Quality Program
Department of Ecology	Department of Ecology

